



## ***Cotton/Soybean Insect Newsletter***

**Volume 14, Issue #7      Edisto Research & Education Center in Blackville, SC**

**11 July 2019**

### **Pest Patrol Alerts**

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter “y” to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

### **Updates on Twitter**

When noteworthy events happen in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.



### **Scouting Workshops**

Your ag-focused county agents and I will be offering some in-field scouting workshops for cotton and soybean insects this summer. The trainings will be free to attend, start in the morning, include lunch, and end shortly after that. The dates for those interactive workshops are:

- 18 July 2019 in Cameron, SC. Flyer attached to the email for this newsletter.
- 25 July 2019 at the Lowrys Community Center in Chester, SC. Flyer attached to the email.
- 31 July 2019 possible date for workshop at Edisto REC near Blackville, SC. Details soon.

Stay tuned for more information!

### **News from Around the State**

**Charles Davis**, county agent covering Calhoun and Richland Counties, reported that in the fields he was in this week “I found tons of aphids, a couple of immature tarnished plant bugs, plenty of hooded beetles and ladybug larvae. No stink bugs.”

### **Cotton Situation**

As of 7 July 2019, the USDA NASS South Carolina Statistical Office estimated that about 65% of the crop is squaring, compared with 53% at this time last week, 47% at this time last year, and 53% for the 5-year average. About 24% of the crop is setting bolls, compared with 9% at this time last week, 4% at this time last year, and 13% for the 5-year average. The condition of the crop was described as 6% excellent, 57% good, 31% fair, 6% poor, and 0% very poor. These are observed/perceived state-wide averages.

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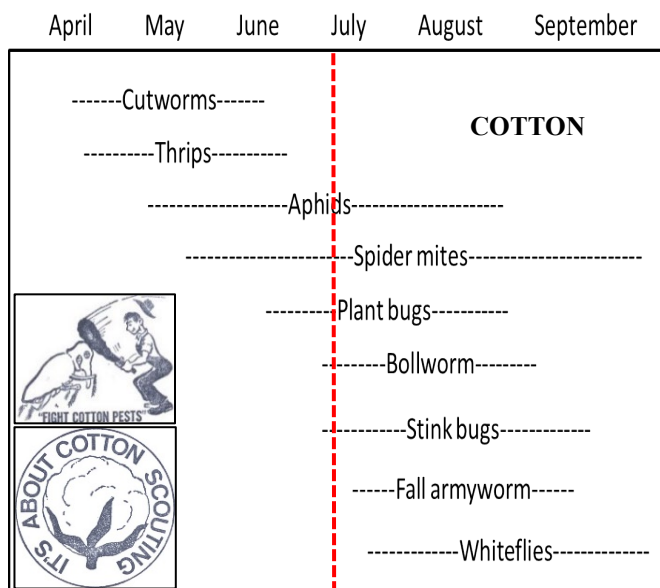
### Cotton Insects

Again, our current place on time on the chart to the right goes right through aphids, spider mites, and plant bugs and starts to slip into bollworm and stink bug territory. That's is right on target again this week.

The fungus for the cotton aphid has been reported in southern latitudes, and I have seen and heard of some locally, so aphids should be feeling the wrath of that natural control soon.

I haven't heard much about spider mites and suspect that the scattered thunderstorms have kept them beat back a good bit.

Plant bugs have been mostly a no-show in our surveys across the state, but we did have a couple of fields that hit treatment threshold, so they can be an issue in selected fields...you have to go scout to be sure!



Bollworm moths caught in pheromone traps have been very low at Edisto, and I have mentioned the low-to-moderate infestations of corn earworm in corn ears already, so I am not sure how of an issue bollworm will be this season. So far, it is looking like low pressure from bollworm.

I suspect that the large populations of stink bugs we observed in corn have been holding up there and are waiting for corn to dry down more before moving in droves to cotton. I think there will be a big wave at some point, but we have some in cotton mating now and depositing egg masses...I saw 2<sup>nd</sup> instars of southern green stink bug in cotton this week, so they are growing in numbers. Be able to recognize the small immatures and the different species. Here are a few photos that might help.



Adult of rice stink bug (left) is not an issue in cotton or soybeans. Nymph of brown stink bug (below) on boll.



Nymphs of green stink bug.



1<sup>st</sup> through 5<sup>th</sup> instar and adult of southern green stink bug.

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### Soybean Situation

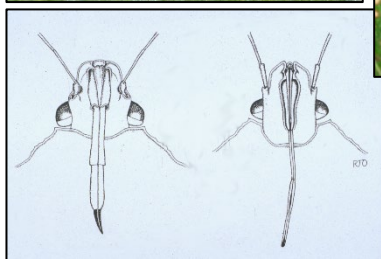
As of 7 July 2019, the USDA NASS South Carolina Statistical Office estimated that about 96% of the crop has been planted, compared with 94% the previous week, 96% at this time last year, and 96% for the 5-year average. About 85% of the crop has emerged, compared with 76% the previous week, 90% at this time last year, and 91% for the 5-year average. About 12% of the crop is blooming, compared with 4% the previous week, 4% at this time last year, and 10% for the 5-year average. The condition of the crop was described as 3% excellent, 72% good, 25% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

April May June July August September October

-----Threecornered alfalfa hopper-----	<b>SOYBEAN</b>
-----Grasshoppers, other misc. defoliators-----	
-----Tobacco budworm-----	
-----Corn earworm-----	
-----Kudzu bugs-----	
-----Green cloverworm-----	
-----Soybean looper-----	
-----Stink bugs-----	
-----Velvetbean caterpillar-----	

### Soybean Insects

Again, kudzu bugs (adults and small nymphs on stems shown at right on soybeans I looked at today) remain the most numerous insect in our sampling this week, and we are picking up more stink bugs in the maturity groups with pods that were planted early. So, stink bugs know where to go to find the perfect setup for their offspring. They ride “the wave” of crops by growth stage as the season progresses. I have yet to see **significant** populations of defoliating caterpillars (soybean looper, green cloverworm, velvetbean caterpillar) or pod-feeding insects (podworm, stink bugs).



Nymph of redbanded stink bug (upper left), nymphs of kudzu bug (upper center and far right with adults), adult of spined soldier bug (right) (a predaceous stink bug), and mouthparts of predatory and plant-feeding stink bug (lower left).



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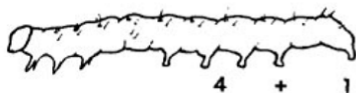
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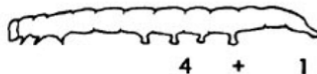
It is never too early to start talking about identifying caterpillars and moths. Know these major species:



## FIELD KEY TO COMMON SOYBEAN CATERPILLARS



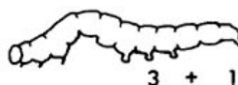
**CORN EARWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



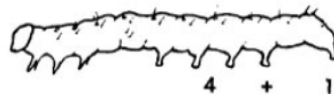
**VELVETBEAN CATERPILLAR**  
4 + 1 pair prolegs  
Very active when handled



**SOYBEAN LOOPER**  
2 + 1 pair prolegs  
Fatter at tail end  
Looping movement



**GREEN CLOVERWORM**  
3 + 1 pair prolegs  
Not fatter at tail end  
Looping movement



**TOBACCO BUDWORM**  
4 + 1 pair prolegs  
Curls up in hand  
Black "warts" on body



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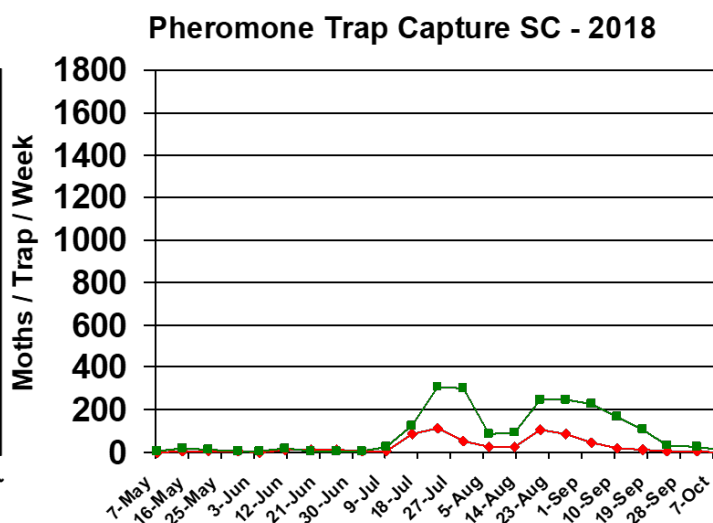
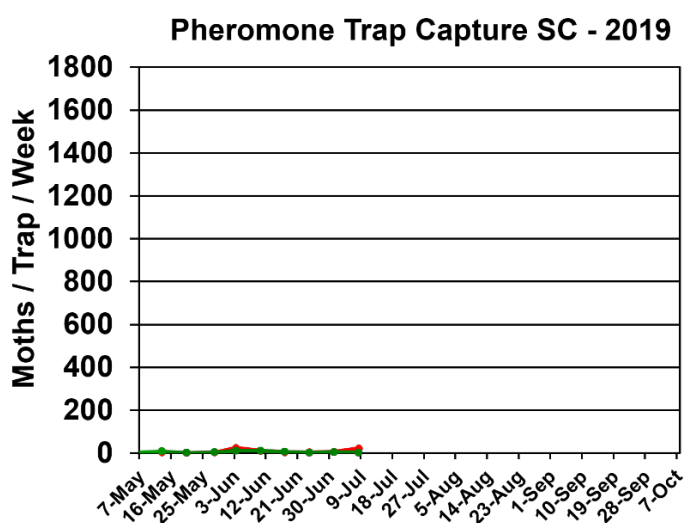


### Bollworm & Tobacco Budworm

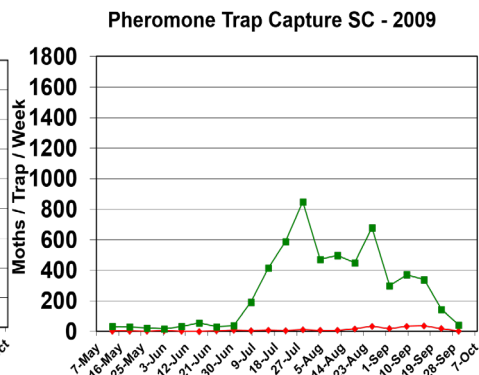
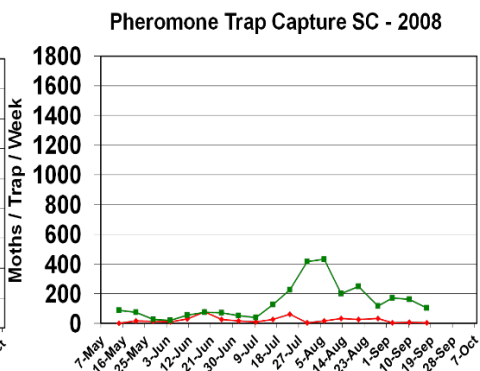
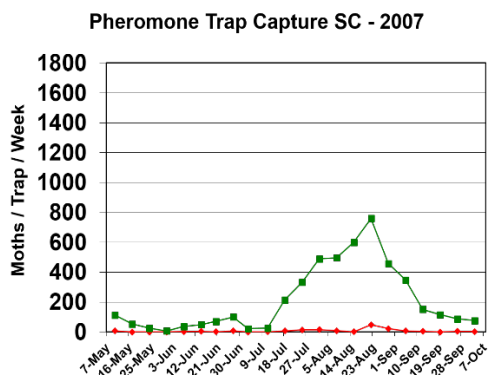


Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2018 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these

data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.



Trap data from 2007-2017 are shown below for reference to other years of trapping data from EREC:



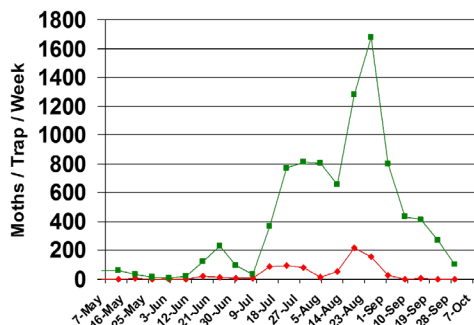
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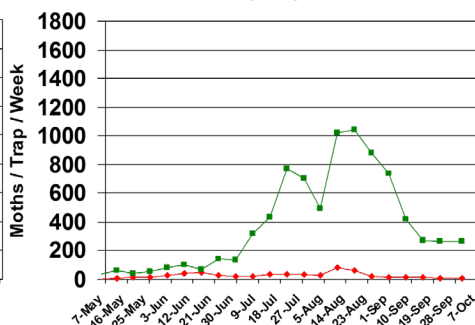
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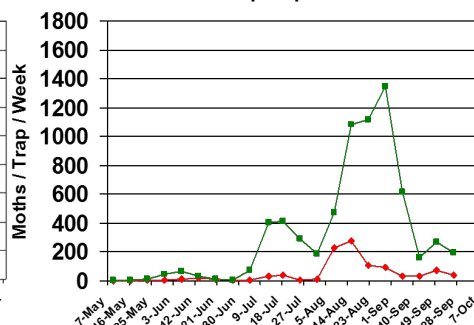
Pheromone Trap Capture SC - 2010



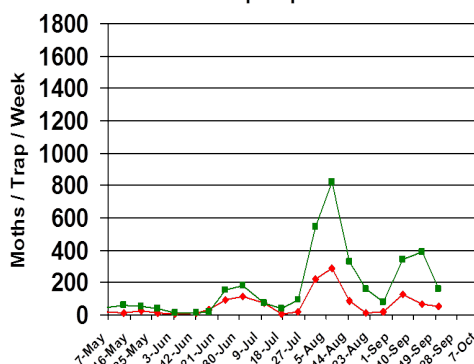
Pheromone Trap Capture SC - 2011



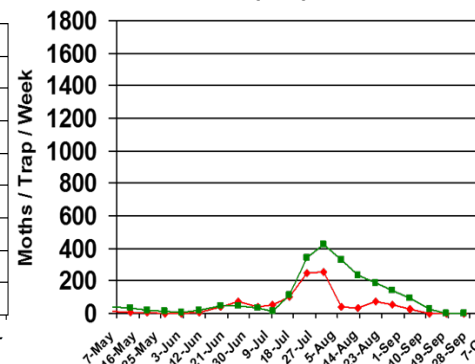
Pheromone Trap Capture SC - 2012



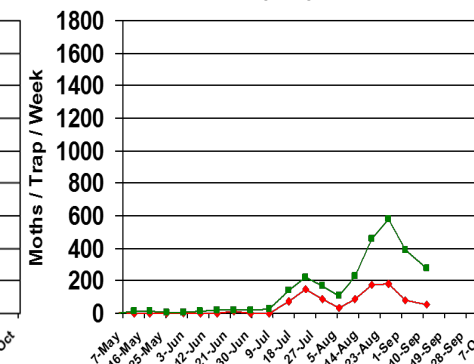
Pheromone Trap Capture SC - 2013



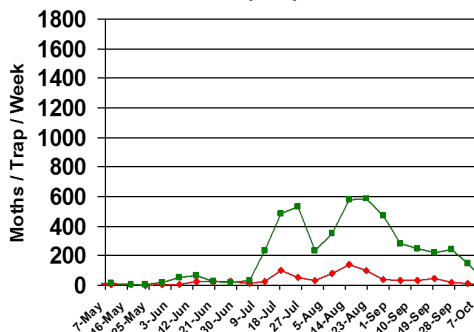
Pheromone Trap Capture SC - 2014



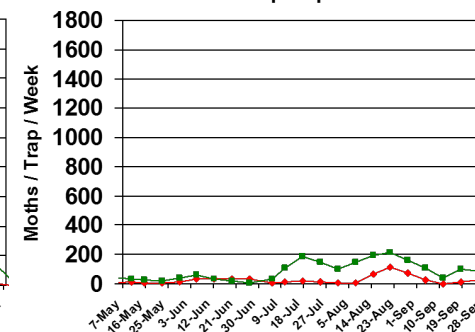
Pheromone Trap Capture SC - 2015



Pheromone Trap Capture SC - 2016



Pheromone Trap Capture SC - 2017



## **Pest Management Handbook – 2019**

Insect control recommendations are available online in the 2019 South Carolina Pest Management Handbook at:

<https://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html>

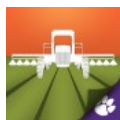
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For more Clemson University Extension information: <http://www.clemson.edu/extension/>

For historical cotton/soybean insect newsletters:

<https://www.clemson.edu/extension/agronomy/cotton1/newsletters.html>

Sincerely,

Jeremy K. Greene, Ph.D.  
Professor of Entomology



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